## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 27 October 2005 (27.10.2005)

**PCT** 

## (10) International Publication Number WO 2005/100305 A1

(51) International Patent Classification<sup>7</sup>: C07C 255/54, 323/41, C07D 317/58, 307/79, 285/14, 311/76, 209/16, 471/04, A61K 31/277, A61P 5/28

(21) International Application Number:

PCT/IB2005/000872

(22) International Filing Date: 1 April 2005 (01.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/561,812 13 April 2004 (13.04.2004)

- (71) Applicant (for all designated States except US): WARNER-LAMBERT COMPANY LLC [US/US]; 201 Tabor Road, Morris Plains, NJ 07950 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DU, Daniel, Yunlong [CN/US]; Pfizer Global Research and Development, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). FEDIJ, Victor [US/US]; Pfizer Global Research and Development, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). HU, Lain-Yen [US/US]; Pfizer Global Research and Development, 2800 Plymouth Road, Ann Arbor, MI 48105 (US). LEI, Huangshu, John [CA/US]; c/o Pfizer Global Research and Development, Ramsgate Road, Sandwich, Kent CT13 9NJ (GB). LEFKER, Bruce, Allen [US/US]; Pfizer Global Research and Development, Eastern Point Road, Groton, CT 06340 (US). SMITH, Yvonne, Dorothy

[US/US]; Pfizer Global Research and Development, 2800 Plymouth Road, Ann Arbor, MI 48105 (US).

- (74) Agents: WOOD, David, J. et al.; Pfizer Research and Development, Ramsgate Road, Sandwich, Kent CT13 9NJ (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANDROGEN MODULATORS

(57) Abstract: The present invention is directed to a new class of 4-cyano-phenoxy-alkyl carboxyl derivatives and to their use as androgen receptor modulators. Other aspects of the invention are directed to the use of these compounds to decrease excess sebum secretions and to stimulate hair growth.